

Appl. No. 10/632,949

Reply to Office Action mailed January 23, 2007

**Amendments to the Drawings:**

The attached sheet of drawing includes a change to Fig. 7. This sheet, which includes Fig. 7, replaces the original sheet including Fig. 7. In Fig. 7, the term "CALACULATED" was changed to --CALCULATED--.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

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**REMARKS**

The amendments to claims 26, 27, 30, 31, 34 to 37, 40 and 41 are supported in the specification as follows:

Support for the antiviral activity of the peptides recited in the present claims against "infectious hematopoietic necrosis virus (IHNV) in salmonid" is supported in the specification in Example 6, on page 58, line 2 to page 59, line 8; Example 7 on page 59, line 21 to page 60, line 5; Example 8 on page 60, lines 6 to 11; and Example 9 on page 60, lines 12 to 17.

Support for the antiviral activity of the peptides recited in the present claims against "rhabdovirus (EVA) in American eels" and "rhabdovirus (EVEX) in European eels" is supported in the specification in Example 7 on page 59, line 21 to page 60, line 5.

Support for the antiviral activity of the peptides recited in the present claims against "swine influenza virus" and "avian influenza virus" is supported in the specification in Example 10 on page 60, line 18 to page 62, line 3.

Support for the antiviral activity of the peptides recited in the present claims against "swine herpes virus" is supported

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in the specification in Example 11 on page 62, line 4 to page 63, line 13.

Support for the antiviral activity of the peptides recited in the present claims against "swine Japanese encephalitis virus" is supported in the specification in Example 12 on page 63, line 14 to page 64, line 20.

Support for the antiviral activity of the peptides recited in the present claims against "shrimp virus (white spot syndrome virus)" is supported in the specification in Example 13 on page 64, line 21 to page 65, line 22.

Support for the antiviral activity of the peptides recited in the present claims against "hepatitis C virus (HCV)" is supported in the specification in Example 14 on page 65, line 23 to page 67, line 5.

With respect to Rule 116, entry of the above amendments is respectfully requested, since such amendments are in reply to 35 USC 112 rejections set forth in the Office Action (final rejection). Such amendments include recitations that are set forth in the paragraph bridging pages 6 to 7 of the Office Action.

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Applicants are pleased that the present claims are free of any prior art rejections.

Claims 3, 13, 16, 24, 25, 28, 29, 32 and 33 were rejected under 35 USC 112, first paragraph, for allegedly failing to comply with the enablement requirement for the reasons set forth beginning at the bottom of page 3 and continuing to the bottom of page 5 of the Office Action.

The reason for this rejection concerns *Pseudomonas sp.* RtIB026, which is identified on page 10, lines 12 to 18 in the specification as being deposited on January 29, 2001 under number FERM BP-7436 at the National Institute of Bioscience and Human Technology (National Institute of Advanced Industrial Science and Technology, International Patent Organism Depository) (located at 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken, 305-8566 Japan).

Submitted concomitantly herewith is a DECLARATION OF MICROORGANISM DEPOSIT of Mr. Mitsuhiro Onoe dated March 22, 2007.

In view of the above, withdrawal of the 35 USC 112, first paragraph rejection as set forth on pages 3 to 5 of the Office Action is respectfully requested.

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Claims 3, 5, 10, 13, 16 and 24 to 41 were rejected under 35 USC 112, first paragraph; for alleged lack of enablement for the reasons set forth on pages 6 to 7 of the Office Action.

It was admitted in the Office Action that the specification is enabling for the treatment of a number of fish species and domestic animals using the currently claimed compositions.

During a telephone interview between the Examiner and the undersigned on April 3, 2007, the Examiner said that the 35 USC 112, first paragraph rejection set forth on pages 6 to 7 of the Office Action was intended to apply only to method claims 27, 31, 35, 37, 39 and 41 (it is noted that claim 39 was canceled hereinabove). The Examiner also stated during the April 3, 2007 telephone interview that the 35 USC 112, first paragraph rejection set forth on pages 6 to 7 of the Office Action was not intended to apply to the composition claims (claims 26, 30, 34, 36 and 40) or the peptide claims (claims 3, 5, 10, 13, 16, 24, 28 and 33).

Applicants' claims directed to a method of preventing and/or treating (claims 27, 31, 35, 37 and 41) were amended to recite a method of preventing a subject from infection by a specific virus and/or treating a subject suffering from infection with a

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specific virus, wherein the effectiveness of such methods is demonstrated in the Examples of the present specification.

With respect to applicants' claims directed to an antiviral composition (claims 26, 30, 34, 36 and 40), such claims were amended to recite an antiviral activity against specific viruses, wherein the effectiveness of which is demonstrated in the Examples in the present specification.

The peptide of formula (I) recited in applicants' claim 3, the peptide of formula (II) recited in applicants' claim 5, the peptide of formula (VI) recited in applicants' claim 10, the peptide of formula (IV) recited in applicants' claim 13 and the peptide of formula (V) recited in claim 16 are all "novel" chemical substances.

The method of preparing the peptide of formula (I) recited in applicants' claim 25, the method of preparing the peptide of formula (IV) recited in applicants' claim 29 and the method of preparing the peptide of formula (V) recited in applicants' claim 33 are all methods of preparing "novel" chemical substances.

According to general patent practice, in order to claim a novel chemical substance (novel compound, novel gene, novel protein, etc.), it is required to specify the novel chemical

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substance by its structure or chemical name, but it is not necessary to recite its use in the claim. Therefore, it is respectfully submitted that it is not necessary to restrict the pending peptide claims to a peptide claim which recites the use of the novel peptide, such as a claim which recites "a peptide having antiviral activity against a specific virus." Similarly, in order to claim a method of preparing a novel chemical substance, it is respectfully submitted that it is not necessary to recite the use of the novel chemical substance in the method claim.

Applicants have informed the undersigned that in the examination process of the patent family cases (Japan, Taiwan, Bangladesh and Malaysia) of the present application, applicants have not been requested to recite the use of the peptide by the Examiner, in the claims of the novel peptides or the claims of the method of preparing the novel peptides.

With regard to the cases in Taiwan (Application No. 91102281), Bangladesh (Application 23/2002, Registration No. 1003828 of 2002) and Malaysia (Application No. PI 20020394), the notices of allowance have already been issued, and the allowed claims for the novel peptides and the allowed claims for the

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method of preparing the novel peptides do not recite the use. With regard to the Japanese application (Application No. 2002-563183), the application is presently being prosecuted. In the first Official Action in the Japanese application, applicants were not asked to recite the use by the Examiner, in the claims of the novel peptides or the claims of the method of preparing the novel peptides.

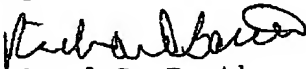
It is therefore respectfully submitted that for the reasons discussed above, the 35 USC 112 rejections have been overcome and therefore all the present claims should be in condition for allowance.

Reconsideration is requested. Allowance is solicited.

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If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below form prompt action.

Respectfully submitted,

  
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- Enclosures: (1) DECLARATION OF MICROORGANISM DEPOSIT  
of Mr. Mitsuhiro ONOE dated March 22, 2007
- (2) Replacement Sheet of drawing
- (3) Annotated Sheet of drawing

Amdt. dated April 3, 2007

Reply to Office Action dated January 23, 2007

Annotated Sheet

7/42

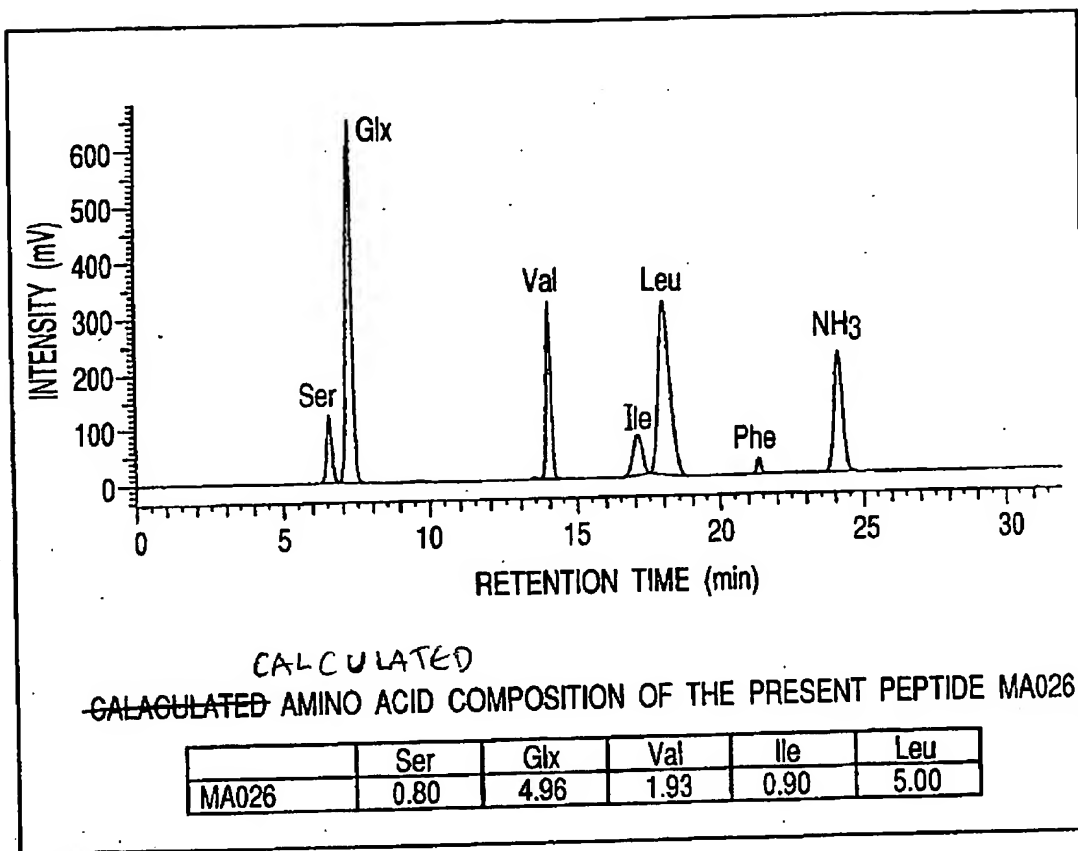


FIG. 7